

Claims:

Claims 1-7 (canceled).

9. (previously presented) An electrode system comprising:

a pair of electrodes disposed on opposite sides of a rigid non-conductive release liner from which the electrodes may be peeled and removed, wherein each electrode comprises an electrode body having first and second sides, wherein the first side comprises a flexible, nonconductive moisture barrier layer having a sealable periphery and the second side comprises a conductive layer, and an electrically conductive gel layer interposed between the conductive layer and the rigid non-conductive release liner in a vapor, air, and/or moisture-proof enclosure formed by the sealing of the periphery of the moisture barrier layer of each electrode to the release liner to enclose the gel layer of each electrode in a moisture barrier enclosure on its respective side of the rigid release liner.

10. (previously presented) An electrode system comprising:

a pair of electrodes disposed on opposite sides of a rigid non-conductive release liner from which the electrodes may be peeled and removed, wherein each electrode comprises an electrode body having first and second sides, wherein the first side comprises a flexible, nonconductive moisture barrier layer having a sealable periphery and the second side comprises a conductive layer, and an electrically conductive gel layer interposed between the conductive layer and the rigid non-conductive release liner in a vapor, air, and/or moisture-proof enclosure formed by the sealing of the periphery of the moisture barrier layer of each electrode to the release liner to enclose the gel layer of each electrode

in a moisture barrier enclosure on its respective side of the rigid release liner,

wherein the electrodes are further in electrical contact with each other through a conductive path that is disposed within the non-conductive release liner and which is in electrical contact with both electrodes through said gel layers.

11. (original) The electrode system of claim 9, wherein each electrode further comprises a lead wire that is connected through said first side to said second side of the electrode and which electrically connects the electrode to a medical device.

12. (original) The electrode system of claim 11, wherein the lead wire is electrically connected to the conductive layer and the electrically conductive gel by a connector comprising a rivet, ring tung terminal, staple, grommet, screw, bolt, or other electrically conducting fastening means that extends from the flexible non-conductive release liner through the conductive layer.

13. (original) The electrode system of claim 12, wherein the electrode further comprises an insulation layer interposed between a portion of the conductive layer and the non-conductive release liner, wherein the insulation layer protects an operator of the electrode from physical contact with the connector which is electrically connected to an electrical source.

14. (original) The electrode system of claim 9, wherein the non-conductive release liner comprises a polymeric sheet, coated paperboard, or foam.

15. (original) The electrode system of claim 9, wherein the non-conductive release liner comprises a

material treated with an adhesion-reducing agent comprising a surface-treated polymeric sheet comprising siliconized polyethylene, polypropylene, polyester, acrylate, polycarbonate, or wax or plastic coated paperboard or foam.

16. (original) The electrode system of claim 9, wherein the conductive layer comprises a laminate comprising tin foil and polyester.

Claims 17-23 (canceled).